



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/876,524 | 06/07/2001 | Jacobus Haartsen | 040071-497 | 9238 |

7590

12/01/2004

Ronald L. Grudziecki
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER

PEREZ, ANGELICA

ART UNIT

PAPER NUMBER

2684

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/876,524

Applicant(s)

HAARTSEN, JACOBUS

Examiner

Angelica M. Perez

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-15 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Dicker (Dicker at al.; US Patent No.: 6,625,466 B1).

Regarding claims 1, 8 and 15, Dicker teaches of a portable device (figure 1, item 2) comprising a receiver (figure 1, item 7) and a control unit (figure 1, item 2; where a mobile device inherently requires a control unit in order to execute the method described); computer program (column 12, lines 11-16; where the computer system comprises the means for executing the method) and a method of allocating resources to a communication channel between a transmitter and a receiver (column 3, lines 26-33; where power is a resource that is "regulated" or "allocated" considering, among

Art Unit: 2684

other, transmission quality)); comprising the steps of: at the receiver, measuring a performance parameter of the communication channel (column 3, lines 34-36; where "transmission quality" corresponds to "performance parameter of the communication channel"); if the performance parameter of the communication channel indicates that the performance of the communication link is satisfactory (column 3, lines 45-51; where when steps a-d are "negative", indicating a "satisfactory performance"; the power is decreased resulting in an increase in bandwidth) (c) if the performance parameter of the communication channel indicates that the performance of the communication link is unsatisfactory (column 3, lines 51-54; where when steps a-d are "positive", they correspond to an "unsatisfactory performance"), the power is decreased resulting in an increase in bandwidth (column 3, lines 51-54; the power is increased resulting in a decrement in bandwidth), then comparing, in the receiver, a signal strength indicator of a communication signal from the transmitter to a threshold (column 3, lines 42-45; where "RSSI" corresponds to "signal strength indicator"); if the signal strength indicator of the communication signal at the receiver satisfies the threshold, (column 3, lines 42-45), then decreasing the bandwidth allocated to the communication channel between the transmitter and the receiver (column 4, lines 42-45; where when a positive step "d" corresponding to a threshold below a specified value (weak signal, high interference), then the transmission power is increased and, consequently, the bandwidth decreases), then the transmission power is increased resulting in a reduction in bandwidth) and if the signal strength indicator of the communication signal at the receiver fails to satisfy the threshold, then performing at least one of increasing the

Art Unit: 2684

transmission power or reducing the user rate (column 4, lines 42-45; where when a positive step "d" corresponding to a threshold below a specified value (weak signal, high interference), then the transmission power is increased).

Regarding claims 2 and 9, Dicker teaches all the limitations according to claim 1. Dicker further teaches where the signal strength indicator is the RSSI (column 3, lines 43-45; where RSSI is the signal strength indicator).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dicker (Dicker et al.; US Patent No.: 6,625,466 B1) in view of MPEP 2144.03.

Regarding claim 3 and 10, Dicker teaches all the limitations according to claims 1 and 8, respectively.

Dicker does not specifically teach the step of increasing the bandwidth allocated to the communication channel comprises decreasing the coding rate applied to a communication signal at the transmitter.

However, Examiner takes "Official Notice" of the fact that increasing bandwidth allocated to the communication channel comprises decreasing the coding rate applied to a communication signal, is well known in the art.

It would have been obvious to a one of ordinary skill in the art at the time the

invention was made to decrease the coding rate applied to a communication signal in order to increase the bandwidth allocated to the communication channel.

Regarding claims 4 and 11, Dicker teaches all the limitations according to claims 1 and 8, respectively.

Dicker does not specifically teach where the step of increasing the bandwidth allocated to the communication channel comprises decreasing the number of bits per symbol applied during modulation of a communication signal at the transmitter.

However, Examiner takes "Official Notice" of the fact that increasing the bandwidth allocated to the communication channel comprises decreasing the number of bits per symbol applied during modulation of a communication signal at the transmitter.

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to decrease the number of bits per symbol applied during modulation of a communication signal in order to increase the bandwidth allocated to the communication channel.

Regarding claims 5 and 12, Dicker teaches all the limitations according to claims 1 and 8, respectively.

Dicker does not specifically teach the step of decreasing the bandwidth allocated to the communication channel comprises increasing the coding rate applied to a communication signal at the transmitter.

However, Examiner takes "Official Notice" of the fact that decreasing the bandwidth allocated to the communication channel comprises increasing the coding rate applied to a communication signal at the transmitter.

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to increase the coding rate applied to a communication signal at the transmitter in order to decrease the bandwidth allocated to the communication channel.

Regarding claims 6 and 13, Dicker teaches all the limitations according to claims 1 and 8, respectively.

Dicker does not specifically teach the step of decreasing the bandwidth allocated to the communication channel further comprises increasing the number of bits per symbol applied during modulation of a communication signal at the transmitter.

However, Examiner takes "Official Notice" of the fact that decreasing the bandwidth allocated to the communication channel further comprises increasing the number of bits per symbol applied during modulation of a communication signal at the transmitter.

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to increase the number of bits per symbol applied during modulation of a communication signal at the transmitter in order to decrease the bandwidth allocated to the communication channel.

Regarding claims 7 and 14, Dicker teaches all the limitations according to claims 1 and 8, respectively.

Dicker does not specifically teach where In addition, Dicker teaches where the step of increasing the bandwidth allocated to the communication channel comprises decreasing the transmission power.

Art Unit: 2684

However, Examiner takes "Official Notice" of the fact that increasing the bandwidth allocated to the communication channel comprises decreasing the transmission power.

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to decrease the transmission power in order to increase the bandwidth allocated to the communication channel.

Conclusion

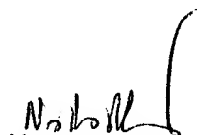
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 703-305-8724. The examiner can normally be reached on 7:00 a.m. - 3:30 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.


Angelica Perez
(Examiner)


NAY MAUNG
SUPERVISORY PATENT EXAMINER

Art Unit 2684

November 15, 2004